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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/728,508	12/05/2003	Lavinia C. Popescu	02.36US	9085

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THE ESTEE LAUDER COS, INC
155 PINELAWN ROAD
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MELVILLE, NY 11747

EXAMINER

KOSSON, ROSANNE

ART UNIT	PAPER NUMBER
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1652

MAIL DATE	DELIVERY MODE
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08/27/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/728,508

Applicant(s)

POPESCU ET AL.

Examiner

Rosanne Kosson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 August 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 6-13 and 15-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-13 and 15-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicants' submission filed on August 13, 2007 has been entered.

Claims 1, 3, 10 and 12 have been amended. Claims 5 and 14 have been canceled. No claim has been added. Accordingly, claims 1-4, 6-13 and 15-18 are examined on the merits herewith.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Objections

Claim 12 is objected to because of the following informality. The claim recites the method of claim 10 in which the "human already have natural curl" etc. Applicants may have meant the method of claim 10 in which the human eyelashes already have natural curl, etc. Appropriate correction is required.

Claim Rejections - 35 USC § 102

In view of Applicants' amendments to the claims, this rejection is withdrawn.

Claim Rejections - 35 USC § 103

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Claims 1-4, 6-13 and 15-18 are again rejected under 35 U.S.C. 103(a) as being unpatentable over Kanebo Ltd. (JP 02-204407, see English full-text translation and English abstract) in view of Ajinomoto Co. Inc. (JP 03-213574, see English translation); Dane, Hair Chemistry 1, The Trichological Society, www.hairscientists.org/hair-chemistry.htm, ©2000, printed from the Internet on July 26, 2004; the record for transglutaminase from BRENDA, http://www.brenda.uni-koeln.de/php/result_flat.php4?ecno=2.3.2.13, printed July 26, 2004; and E-Z Permanent Makeup (<http://www.eyelashperm.com>, which has an embedded link for ordering and product information at <http://www.ezpermanentmakeup.com>), printed from the Internet on July 26, 2004. This rejection has been discussed in the previous Office actions.

Applicants assert that the first four references do not disclose using transglutaminase to enhance the curl of or retain curl in human eyelashes. Applicants assert that Dane and E-Z Permanent Makeup disclose only conventional perming agents.

In reply, as previously discussed, the claimed method is a one-step method of applying a transglutaminase-containing composition to human eyelashes that have curl. Kanebo discloses applying transglutaminase to human hair that has been curled in order to make the hair springier or more elastic. Transglutaminase catalyzes the cross-linking reaction of glutamine residues with lysine residues in the outermost layer of the hair. This treatment imparts, i.e., greater density and springiness to the hair (see English abstract) and makes the hair more flexible and elastic (see p. 2, 1st, 4th and last paragraphs, and p. 3, 1st two paragraphs of the English full-text translation). When curls are made springier or more elastic, they are enhanced, because their appearance and texture are softer. They are also retained better (and enhanced because they are retained better) than if they were not elastic, because if they were not elastic, a force causing them to straighten without the ability to bounce back would leave the hair straight.

Ajinomoto provides evidence that the method of Kanebo enhances and retains the curl in hair, because Ajinomoto discloses that transglutaminase cross-links hair, and, after cross-linking, the shape of the hair is retained. Manufactured fibers of the cross-linked hair do not shrink or pill or dry out (see pp. 3-4 of the English translation). When the shape of curly hair, such as sheep's hair or curly human hair (either naturally curly or permed) is retained, the curls are retained, and the curls are enhanced because their shape is reinforced by chemical bonds.

Dane was cited for its teaching that cross-linking imparts curl to hair and keeps it curly. Because it was known at the time of Applicants' invention that transglutaminase was a cross-linking agent, one of ordinary skill in the art at the time that the invention was made would have expected a transglutaminase treatment to retain and enhance curls in hair. It is the added cross-links in the hair, added covalent bonds, that restrict the keratin protein to a particular shape. It is not critical which amino acids are bound.

BRENDA was cited for its teachings related to the optimum pH for transglutaminase, not for teaching a particular method.

E-Z Permanent Makeup was cited for its teaching that hair keratin can be permed, whether it is eyelash hair or head hair. It is clear that this reference was not cited for a disclosure of a method of using transglutaminase.

But, the rejection is one of obviousness in view of the combination of the cited references. It would have been obvious to one of ordinary skill in the art at the time that the invention was made to use the method of Kanebo on human eyelashes, because one of ordinary skill in the art would have known that eyelashes are a type of hair and because Kanebo discloses that transglutaminase makes human hair springier and more elastic. Ajinomoto teaches the cross-linking reaction of transglutaminase to maintain hair shape, and Dane teaches that when hair is cross-linked in a curly shape, the curl is retained. Thus, one of ordinary skill in the

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art would have had every expectation of success in enhancing or retaining the curl of eyelashes by applying transglutaminase to them in a cosmetic product. Additionally, a person who had permed eyelashes would have wanted to retain or enhance the perm (after going to the trouble and expense of the perm), and it would have been obvious to this person or to a salon stylist who does these perms to treat such permed eyelashes according to the method of Kanebo.

Regarding Applicants' Declaration under 37 CFR §1.132, the results in the declaration are entirely expected, because it was known at the time of the invention that hair can be cross-linked with transglutaminase. Applicants have compared their product to one that is not capable of cross-linking hair because it does not contain the active ingredient or any cross-linking agent. Perming eyelashes is known in the art, and Kanebo teaches a product and method for maintaining a perm.

In view of the foregoing, the rejection of record is maintained.

Double Patenting- Obviousness-type

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

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Claims 1-4, 6-13 and 15-18 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-18 of copending Application No. 11/830,303, which is a continuation of the instant application. Although the conflicting claims are not identical, they are not patentably distinct from each other because the instant claims were originally drawn to a method of enhancing or retaining the curl in a keratinous material or in hair and are now drawn to a method of enhancing or retaining the curl in human eyelashes, the method comprising applying transglutaminase. The copending claims are drawn to a method of enhancing or retaining the curl in human hair, comprising applying transglutaminase. As discussed previously and above, eyelashes are a type of hair. Thus, the copending claims are drawn to a genus of which the instant claims are a species. But, the two sets of claims would not have been restricted from each other had they been presented together in one application (see the parent application), and the instant claims are an obvious variation of the copending claims, because eyelashes are a type of hair.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

No claim is allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rosanne Kosson whose telephone number is 571-272-2923. The examiner can normally be reached on Monday-Friday, 8:30-6:00, alternate Mondays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ponnathapu Achutamurthy can be reached on 571-272-0928. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Rosanne Kosson
Examiner, Art Unit 1652

rk/2007-08-20

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